Cognitive Therapy: Past, Present, and Future

Aaron T. Beck

Proponents of cognitive therapy have striven to establish this approach as a mature system of psychotherapy for over 3 decades. The theoretical formulations have been enriched by clinical extrapolations from the neoanalytic and experimental findings from cognitive psychology. The therapeutic strategies and techniques have been refined as a result of interaction with behavior therapy, which also influenced the emphasis on empirical testing of the theoretical formulations and the therapeutic applications. Outcome trials have demonstrated efficacy in a number of common disorders. New emphasis on the crucial importance of specific formulations (especially dysfunctional beliefs) has provided important clues to the treatment of a large number of other disorders. I conclude that cognitive therapy has fulfilled the criteria of a system of psychotherapy by providing a coherent, testable theory of personality, psychopathology, and therapeutic change; a teachable, testable set of therapeutic principles, strategies, and techniques that articulate with the theory; and a body of clinical and empirical data that support the theory and the efficacy of the theory.

Can a fledgling psychotherapy challenge the giants in the field—psychoanalysis and behavior therapy? (Beck, 1976, p. 333)

In the 16 years since I raised that question, substantial information has accumulated to address it. To make a judgment, I proposed a set of standards for evaluating a system of psychotherapy. A condensed version is as follows: (a) There should be empirical evidence to support the principles underlying the therapy, which should articulate with the techniques. (b) The efficacy of the treatment should have empirical support (Beck, 1976, p. 308). In retrospect, I added that the system should include "a tenable theory of personality and of the process of change" (Beck, 1991a, p. 192). Although there have been many definitions of cognitive therapy, I have been most satisfied with the notion that cognitive therapy is best viewed as the application of the cognitive model of a particular disorder with the use of a variety of techniques designed to modify the dysfunctional beliefs and faulty information-processing characteristic of each disorder. The theory of personality and psychopathology has been described in a number of publications (e.g., see Beck & Weishaar, 1989). In this review, I will focus primarily on the reports regarding the efficacy of cognitive therapy in various disorders.

Looking Back

Reflecting on the accumulated knowledge in 1990, I suggested that the crucial standards relevant to the application of cognitive therapy to the field of psychotherapy had largely been supported (Beck, 1991b). Also, there was growing support for the cognitive theory of personality and psychopathology. Literature reviews by Ernst (1985) and by Haaga, Dyck, and Ernst (1991), for example, indicated strong support for the "negativity hypothesis" of the cognitive model of depression. Other aspects of the cognitive model of depression received weaker support. The cognitive models of anxiety and of panic disorders have also received support from diverse sources, as has the cognitive model of suicide (Beck, 1986, 1987; Beck, Brown, Berchick, Stewart, & Steer, 1990).

A crucial question of special interest to the practitioner and consumer is "Does it work?" Past and current findings show significant empirical support for the applications of cognitive therapy in a variety of frequently occurring disorders, with a broad range of populations, and in a variety of settings (i.e., inpatient and outpatient) and formats (individual, couples, family, and group).

Depression

End-of-treatment analysis. Most of the outcome studies of cognitive therapy have been concerned with unipolar depression. Dobson (1989) conducted a meta-analysis of 27 separate studies involving 34 comparisons of cognitive therapy with either another form of treatment or a wait-list control. His analysis showed that cognitive therapy was significantly superior to other treatments, including behavior therapy, psychodynamic therapy, nontherapeutic therapy, and other psychotherapies; as expected, cognitive therapy was superior to no treatment. Cognitive therapy was found to be superior to pharmacotherapy as well; this comparison also included the results of the National Institute of Mental Health (NIMH) collaborative study of the treatment of depression (Elkin et al., 1989). Although the results at the end of treatment of this trial did not show a robust effect of cognitive therapy in comparison with the other groups, cognitive therapy appeared to have a more durable effect after treatment was concluded (see later discussion).

Follow-up analysis. Of importance is the fact that cognitive therapy has generally been found to be significantly more effective than pharmacotherapy on 1-year and 2-year follow-up. As summarized by Hollon and Najavits (1988), the relapse rate for cognitive therapy was approximately 30%, as compared with a relapse rate in excess of 60% for the pharmacotherapy group. A 2-year follow-up by Blackburn, Emslie, and Bishop (1986) also

Aaron T. Beck, Department of Psychiatry, University of Pennsylvania.

Correspondence concerning this article should be addressed to Aaron T. Beck, who is now at the Center for Cognitive Therapy, Room 754, The Science Center, 3600 Market Street, Philadelphia, Pennsylvania 19104-2648.
demonstrated the superiority of cognitive therapy over pharma-
cotherapy. A more recent study by Shea et al. (1992) of patients
in the NIMH collaborative study showed that at 6- and 18-
month follow-up, cognitive therapy was nonsignificantly supe-
rior to pharmacotherapy and interpersonal psychotherapy and
placebo with clinical management on 9 of 11 compar-
isons. Of particular interest was that cognitive therapy patients
had a higher rate of "clinical recovery" as measured by end of
treatment improvement that persisted for 8 weeks.

**Generalized Anxiety Disorder**

Cognitive therapy has also been found to be effective in the
treatment of generalized anxiety disorder. An uncontrolled
study by Sanderson and Beck (1990) showed a substantial and
significant reduction in anxiety and depression in a sample of
32 patients treated with cognitive therapy for an average of 10
weeks of treatment. Patients with personality disorders in addi-
tion to generalized anxiety disorder also improved signifi-
cantly, but the treatment was longer than for those without a
personality disorder.

Anxiety management training (Blowers, Cobb, & Mathews,
1987) and cognitive-behavioral techniques (Durham & Turvey,
1987) have been used with promising results. These studies,
however, were compromised by methodological inadequacies,
in particular the use of nonstudy concomitant medication, that
could have misleadingly distorted the nature of the presenting
problem.

Borkovec and Mathews (1988) conducted one of the few stud-
ies to rule out the use of nonstudy concurrent medication. They
found no difference in the efficacy of nondirective therapy,
coping desensitization, and cognitive therapy in the treatment
of generalized anxiety disorder and panic disorder.

Three studies compared the efficacy of cognitive-behavioral
therapy with pharmacological alternatives in the management
of generalized anxiety disorder. Lindsay, Gamu, McLaughlin,
Hood, and Elsper (1984) reported superiority for cognitive-be-
havioral therapy and anxiety management training as com-
pared with lorazepam and a waiting-list control group at 3-
month follow-up. Power, Jerrom, Simpson, Mitchell, and
Swanson (1989) reported superiority of cognitive-behavioral
therapy when compared with diazepam or placebo at the end of
the study period and at 12-month follow-up.

Power et al. (1990) reported the results of a study of a con-
trolled comparison of 101 patients meeting criteria of the Diag-
nostic and Statistical Manual of Mental Disorders (3rd ed.; Amer-
ican Psychiatric Association, 1980) for generalized anxiety dis-
order who were randomly allocated to cognitive-behavioral
therapy, diazepam, placebo, cognitive-behavioral therapy plus
diazepam, or cognitive-behavioral therapy plus placebo, and
treated over 10 weeks. Outcome measures at the end of treat-
ment and at 6-month follow-up revealed the superiority of all
cognitive-behavioral therapy treatments, especially cogni-
itive-behavioral therapy alone and cognitive-behavioral therapy plus
diazepam.

Butler, Fennell, Robson, and Gelder (1991) reported a con-
trolled clinical trial of 57 patients meeting criteria for general-
ized anxiety disorder and fulfilling an additional severity crite-
ron. Individual treatment of 12 sessions duration showed a

**Panic Disorder**

Cognitive therapy has been particularly effective in the treat-
ment of panic disorder. An uncontrolled study conducted by
Sokol, Beck, Greenberg, Wright, and Berchick (1989) at the
Center for Cognitive Therapy in Philadelphia showed a com-
plete cessation of panic attacks in all of the patients involved in
the study. These gains were maintained at 1-year follow-up. A
subsequent study at the same clinic compared cognitive therapy
with supportive therapy (Beck, Sokol, Clark, Berchick, &
Wright, in press). At the end of 8 weeks, there was significant
improvement in the cognitive therapy treatment but not in the
supportive treatment; the difference between the groups was
statistically significant. The supportive group was then crossed
over to 12 weeks of cognitive therapy. At the end of 12 weeks
of cognitive therapy, both the original cognitive therapy group
and the crossover group had a minimum number of panic attacks.
These results held for 1 year.

Clark (1991) reported statistically significant superiority of
cognitive therapy over behavior therapy, imipramine, and pla-
geo control at the end of treatment, and this superiority per-
sisted until the end of 1-year follow-up.

Another index of the effectiveness of cognitive therapy is the
reduction of anipanic medication. Newman, Beck, Beck,
Tran, and Brown (1990) reported the results of cognitive ther-
apy with two groups of patients: those who were receiving med-
ication when they entered into the study and those who were
not. The "medicated" group and the nonmedicated group
showed substantial improvement. In addition, there was a 90%
reduction of anipanic medication in the medicated group
without any rebound effect or relapse. This study showed that
applying the standard principles of cognitive therapy to the
withdrawal symptoms enabled the patient to tolerate them
without experiencing a recurrence of panic attacks.

**Eating Disorders**

Eating disorders appear to be responsive to cognitive therapy.
Fairburn et al. (1991) reported that cognitive-behavioral ther-
apy with bulimia patients was more effective than both inter-
personal psychotherapy and a simplified behavioral version of
cognitive-behavioral therapy. Aigras et al. (1992) found that a
combination of maintenance imipramine and cognitive-behavior-
therapy produced better long-term results than imipra-
mine alone, cognitive therapy alone, or placebo.

**Looking Ahead**

One of the interesting developments in the application of
cognitive therapy has been the formulation of a specific cogni-
tive model for each of the "new" disorders. A central theme of
the applications has been first, the general framework of cog-
nitive theory, namely, that there is a bias in information processing
that produces dysfunctional behavior, excessive distress, or
both. Second, specific beliefs incorporated into relatively stable
structures—schemas—lead to these difficulties (the concept of
cognitive specificity). Even when more traditional therapy
formats (e.g., couples therapy or family therapy) have been re-
tained, cognitive therapists have explored and evaluated dys-
functional beliefs and interpretations. The addition of the
cognitive dimension has facilitated a more powerful approach
(Beck, 1991b).

Drug abuse patients have a series of “need” beliefs such as “I
can’t stand my boredom (anxiety, depression, etc.) without a fix”
and permission beliefs such as “It’s okay to have a smoke this
time.” Addiction is viewed as based on a cluster of beliefs
of this nature (Beck, Wright, Newman, & Lie, in press). An out-
come study of cognitive therapy for cocaine addiction is
currently under way at the University of Pennsylvania.

Studies of bipolar disorder are currently under way at the
University of Texas in Dallas with a treatment manual (Basco &
Rush, 1991). A similar study with rapid cycling bipolar affective
disorder is being conducted at the University of Pennsylva-
nia with a treatment manual authored by Newman and Beck
(1992). The focus is on beliefs that undermine medication com-
pliance (e.g., “The medication destroys my creativity, makes me
a dull person, etc.”) and on manic beliefs (e.g., “I have excep-
tional powers and should use them.”), as well as on the basic
depressotypic beliefs (Weissman & Beck, 1978).

Depression in patients who have tested positive for human
immunodeficiency virus (HIV) is the subject of an outcome trial
at Cornell Medical School involving the use of a treatment man-
ual developed by Fishman (1990). A typical belief is “I am
a social outcast (helpless, worthless, unlovable) because I have
a dirty disease.”

Outcome studies for cognitive therapy of avoidant personal-
ity disorder and obsessive-compulsive disorder are in progress at
the University of Pennsylvania. The treatment manual (Beck,
Freeman, & Associates, 1990) lists 140 beliefs covering all of the
various personality disorders. A typical avoidant belief is “I
must avoid sticking my neck out (taking chances, confronta-
tions, experiencing distress, etc.).” Obsessive-compulsive be-
liefs include “I must follow a foolproof system or there will be
chaos.”

Studies of sex offenders are being conducted at the University
of Oklahoma and elsewhere (Cole, 1989). A typical belief of an
incest offender is “Sex with my daughter will be good for our
relationship and will help her to mature.”

Posttraumatic stress disorders are the subject of many stud-
iess, particularly in the United Kingdom. The work on rape
victims by D. M. Clark (personal communication, December 1,
1991) at Oxford, for example, goes beyond standard revivifica-
tion of traumatic episodes and focuses on the victims’ specific
beliefs, such as “This (rape incident) proves that I am just an
object” or “I am worthless because I felt some pleasure.”

Cognitive therapy is being applied in an interesting way to
multiple personalities by Fine (in press). Cognitive techniques
are used to elicit and restructure the basic beliefs of each of the
“personalities” as they surface. An example is “If I kill Dora
(another personality), I will be free.” Strategies are used to dem-
strate the unity of the entire person and the distinctiveness of
the beliefs. By restructuring the separate sets of beliefs, the
therapist attempts to facilitate the reintegration of the personal-
ity.

Hypochondriasis has been targeted as a disorder amenable to
cognitive therapy (Warwick, 1991; Warwick & Salkovskis,
1989). Typical beliefs are “The sensations I feel must be due to
a serious illness” and “Even though the doctors haven’t found any
pathology so far, I must have another examination.” Prelimi-
nary findings indicate a notable improvement with cognitive
therapy when compared with a control group not receiving any
psychological intervention.

Obsessive-compulsive disorder has been studied extensively
by Salkovskis (1989), who proceeded beyond the standard behav-
ioral approach and focused on cognitions and beliefs
aroused by the obsessive thoughts; for example, “1 must be
crazy to have thoughts like this” or “I will be my fault if I don’t
do something about the (presumed) danger.” Outcome studies
are currently evaluating this approach.

Approaches to marital problems are being investigated by
Epstein (University of Maryland) and Beck (University of Penn-
sylvania). Texts relevant to couples therapy (Epstein & Baucom,
1988) and self-help for couples (Beck, 1988) depict the typical
dysfunctional beliefs, such as “If we can’t talk about our prob-
lems, our marriage is in trouble” (mostly wives) and “If we have
to talk about our problems, our marriage is in trouble” (mostly
husbands).

Cognitive family therapy has been formulated recently and
focusses on the conflicting beliefs of family members. Examples
of such beliefs are “A child needs continuous love and care”
(mother); “A child needs discipline” (father); and “I need to be
left alone” (child). Such conflicting beliefs lead to accusations
of “indulging the child” (by the father) and “being too harsh”
(by the mother) and to the wish, on the part of the child, to run
away. This formulation has been expanded by Wright and Beck
(in press).

Cognitive group therapy has been used extensively (Freeman,
1983). Among the many therapeutic techniques are the eluci-
dation of the basic beliefs of individual group members and their
testing and evaluation by the rest of the group. Some beliefs
relevant to the group that emerge are “I appear like a fool in a
group” and “I am basically undesirable.”

Schizophrenic delusions and hallucinations have been studied
extensively by Hole, Rush, and Beck (1979) and Kingdon and
Turkington (1991). In addition to working with the patients to
list their distorted conclusions, the therapists address basic be-
liefs, such as “If I hear voices, it means somebody is trying to
control my mind” and “Being mentally ill means I am helpless
(worthless, undesirable).”

The literature on schizophrenia suggests that the prognosis
in terms of recurrence or rehospitalization for schizophrenia is
worse for patients in families who show high levels of expressed
emotions (mostly negative emotions) toward the patients.

Although the causal link has not as yet been established,
future work needs to be done in terms of understanding the fam-
ily’s cognitions, their relationship to expressed emotions and to
prognosis, and the interactions of the family members with
those of the patients. There is also some evidence that higher
levels of family blame of the patient are associated with higher
levels of expressed emotion (Haldrow, 1991). Future analyses
should examine how this affects the patients, particularly in terms of their beliefs about their inadequacy and social isolation, their hopelessness, and their self-criticism (Halford, 1991).

If meaningful relationships are established, then the particular cognitions of the family and of the schizophrenic member can become a focus for cognitive interventions, in cognitive family therapy as well as in individual cognitive therapy.

Cognitive therapy has been used in a number of other clinical conditions; a detailed treatment summary has been presented in Cognitive Therapy in Clinical Practice (Scott, Williams, & Beck, 1989). Of particular interest is the application of cognitive therapy to the mentally handicapped and cancer patients (Scott, 1989).

A monograph on cognitive therapy with cancer patients that served as a basis for a treatment trial has been produced by Moorey and Greer (1989). A preliminary study indicated that patients in a cognitive group therapy modality showed a greater reduction of dysphoria symptoms than did a control group. Long-term follow-up examining the effects on survival is now being carried out.

Many of the other new areas in which there has been preliminary support for the application of cognitive therapy have been reported in the Comprehensive Casebook of Cognitive Therapy edited by Freeman and Dattilio (in press). Although these reports do not in themselves establish the efficacy of cognitive therapy for these conditions, they can help the clinician in formulating and adapting strategies for cases involving these problems. They can also provide an impetus for controlled outcome studies. It should be noted that much of the controlled research in the past was stimulated by case reports. Chapters detailing treatment in these promising applications address the following disorders and problems: performance anxiety, posttraumatic stress disorder, stress in general, adjustment disorder, dysthymia, obesity, schizotypal personality disorder, post-stroke depression, multiple personality disorder, and chronic pain. There are also chapters on the application of cognitive therapy to children, adolescents, and elderly patients.

A summary of the most recent applications of cognitive therapy to a variety of disorders and problems described in papers and posters at the World Congress of Cognitive Therapy in Toronto in June 1992 illustrates the breadth of the principles of cognitive therapy and, I hope, will serve as a stimulus for systematic research: chronic pain, criminal offenders, social phobia, chronic headaches, chronic tic disorders, HIV-related distress, alcoholism, morbid jealousy, irritable bowel syndrome, insomnia, schizophrenic disorder, guilt and shame, nicotine addiction, chest pain, organic brain damage, shoplifting, generalized tic disorder, and sexual problems.

It may be obvious to spectators in the therapeutic arena that cognitive therapy has co-opted (or been co-opted by) a large sector of the behavior therapy approaches to psychopathology. What may not be so readily discerned are many concepts derived initially from psychoanalysis (e.g., the emphasis on identifying the conscious meanings of pathogenic events) and the conceptualization of separate modes of cognitive processing (the reflective rational vs. the automatic nonrational), corresponding, in part, to Freudian notions of primary and secondary processing. Considerable research using strategies from cognitive psychology has supported the theoretical foundations of cognitive therapy. The very broad application of the theory and strategies bolsters the claim of cognitive therapy as a robust system of psychotherapy.

References


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